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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/691,273	10/18/2000	Robert Anthony Marin	TK-3410-US-NA	4960

23906 7590 08/25/2004

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WILMINGTON, DE 19805

EXAMINER

SALVATORE, LYNDIA

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/691,273

Applicant(s)

MARIN ET AL..

Examiner

Lynda M Salvatore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4, 7-18 and 21-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 2-4, 7-18 and 21-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's amendment and accompanying remarks filed 06/03/04 have been fully considered and entered. Claims 1,5,6,19 and 20 have been amended and claims 2-4, 7-12, 21 and 25-30 have been canceled as requested. Applicant's arguments have been fully considered, however, upon further consideration of Applicant's amendments a new ground of rejection is set forth herein below.

Response to Arguments

Claim Rejections - 35 USC § 112

2. Applicant's cancellation of claims 1,5, and 6 renders moot the rejection of claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As such this rejection is hereby withdrawn.

3. Applicant's cancellation of claims 1,5, and 6 renders moot the rejection of claims 1-18 and 24-27 rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for flash-spun sheet material made of polyethylene and one of two solvents (i.e., n-pentane or FR-EONY-I 1), does not reasonably provide enablement for the presently claimed flash-spun sheet material having the recited hydrostatic head pressure, Gurley Hill porosity, and MVTR-LYSSY. As such this rejection is hereby withdrawn.

Response to Arguments

Claim Rejections - 35 USC § 102

4. Applicant's cancellation of claims 5 renders moot the rejection of claims 5,26, and 27 rejected under 35 U.S.C. 102 (b) as being anticipated by Lim et al., US 5,290,628. As such, this rejection is hereby withdrawn.

Response to Arguments

Claim Rejections - 35 USC § 102/103

5. Applicant's cancellation of claims 1,5, and 6 renders moot the rejection of claims 1-18 rejected under 35 U.S.C. 102 (b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over or Steuber, US 3,169,899. As such, this rejection is hereby withdrawn.

6. Applicant's cancellation of claims 1,5, and 6 renders moot the rejection of claims 1-18 rejected under 35 U.S.C. 102 (b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Blades US 3,081,519. As such, this rejection is hereby withdrawn.

7. Applicant's cancellation of claims 5 and 6 renders moot the rejection of claims 6-18 and 24-27 rejected under 102 (b) as being anticipated or in the alternative, under 35 U.S.C. 103(a) as obvious over Lim '628., as applied to claim 5 above. As such, this rejection is hereby withdrawn.

8. Applicant's cancellation of claims 5 and 6 renders moot the rejection of claim 6 rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lim et al., US 6,034,008. As such, this rejection is hereby withdrawn.

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9. Applicant's amendment to claim 28 is found sufficient to overcome the rejection of claim 28 rejected under 35 U.S.C. 102 (b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over or Shin et al., US 5147568. Specifically, the prior art of Shin et al., teaches employing greater than 10 wt. % of a co-solvent. As such, this rejection is hereby withdrawn.

Response to Arguments

Claim Rejections - 35 USC § 103

10. Applicant's cancellation of claims 1,5, and 6 renders moot the rejection of claims 1-18 rejected under 35 U.S.C. 103(a) as obvious over or Shin et al., US 5147568. As such, this rejection is hereby withdrawn. With regard to the rejections of claims 29-30, Applicant's amendments to claims 29-30 have been found to patently distinguish the claims over the prior art of Shin et al. Specifically, the prior art of Shin et al., teaches employing greater than 10 wt. % of a co-solvent. For these reasons, the rejection of claims 29-30 is also withdrawn.

11. Applicant's cancellation of claim 5 and amendment to claim 21 renders moot the rejection of claims 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shin et al., US 5147568 as applied to claims 5 and 7 above, and further in view of Bisbis et al., US 5,919,539. As such, this rejection is withdrawn.

12. Applicant's cancellation of claim 5 and amendment to claim 21 renders moot the rejection of claims 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steuber, US 3,169,899 as applied to claims 5 and 7 above, and further in view of Bisbis et al., US 5,919,539. As such, this rejection is withdrawn.

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13. Applicant's cancellation of claim 5 and amendment to claim 21 renders moot the rejection of claims 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blades US 3,081,519 as applied to claims 5 and 7 above, and further in view of Bisbis et al., US 5,919,539. As such, this rejection is withdrawn.

New Ground of Rejection

Claim Rejections - 35 USC § 103

14. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

15. Claims 2-4, 7-18, and 24-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGinty et al., US 6,117,801 in view of Blades et al., 3,081,519.

The patent issued to McGinty et al., teaches flash spinning a mixture comprising 17.7 % of high density polyethylene polyethylene and spin agent consisting of a mixture of 32 % cyclopentane and 68% normal pentane (Column 10, 15-25). McGinty et al., teaches flash spinning the solution into plexifilimentary film-fibrils which are collected to form a non-woven sheet (Column 10, 35-45 and Claim 7-9). McGinty et al., teaches a spin temperature of 185°C (Column 10, 28-30). McGinty et al., teaches a surface area greater than 8m²/gm (Claim 4). The resulting flash spun non-woven exhibits improved softness and quietness properties (Abstract). McGinty et al., fails to teach the claimed spinning temperature, however, the claimed spinning temperature is known in the art. For example, the patent issued to Blades et al., teaches spinning linear polyethylene at temperatures ranging from 190-216°C (Column 13, 15-30 and Table IV). Blades et al., teaches that the formed strands exhibit good softness and strength properties (Column 13, 55-60).

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Therefore, motivated by the desire to form plexifilimentary strands having the combination of properties such as softness, quietness and strength it would have been obvious to one having ordinary skill in the art to increase the spinning temperature in the process taught by McGinty et al., as taught by Blade et al.

With regard to the physical property limitations recited in claims 2-4,7-18 and 28-30, although the combination of prior art does not explicitly the desired combination of crush value, surface area, Frazier Permeability, hydrostatic head, and Gurley Hill Porosity values it is reasonable to presume that said property will be met by the plexifilimentary film-fibrils of the invention of McGinty et al., in view of Blade et al. Support for said presumption is found in the use of like materials (i.e., polyethylene/normal pentane/cyclopentane) and the use of like processes (flash-spun plexifilimentary filaments at a temperature ranging from 190-216°C), which would result in the claimed property. The burden is upon the Applicant to prove otherwise

With regard to intended use of a garment, filter media or pillow cover, it is the position of the Examiner that since the prior art meets the chemical and structural limitations there is nothing to evidence that the non-woven sheet of McGinty et al., in view of Blade et al. al., could not function in the desired claimed capacities.

16. Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGinty et al., US 6,117,801 in view of Blades et al., 3,081,519 as applied to claim 29 above and further in view of Bisbis et al., US 5,919,539

The combination of prior art fails to specifically teach point bonding or pattern (i.e., linen and ribbed), however, the patent issued to Bisbis et al., teaches bonding TYVEK® Style 1422A panels/sheets, which are made from flash-spun polyethylene

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plexi-filamentary fibers that have been thermally bonded (Examples 1-4). Bisbis et al., describes the TYVEK® Style 1422A as having a linen texture on one side and a ribbed texture on the opposite side.

Therefore, motivated to provide a textured surface it would have been obvious to one having ordinary skill in the art at the time the invention was made to bond non-woven article of McGinty et al., in view of Blade et al. al., in the same manner as the TYVEK® Style 1422A of Bisbis et al.

Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M Salvatore whose telephone number is 571-272-1482. The examiner can normally be reached on M-F.

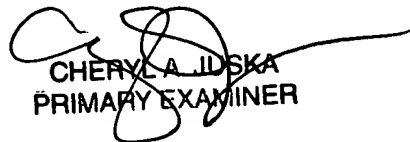
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1482. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

August 21, 2004

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CHERYL A. JILKA
PRIMARY EXAMINER